

Offices of the County Executive . 101 Monroe Street . Rockville, Maryland 20850 $\,$

Subject: Adoption of Building Construction Standards – IRC/2000Number: 36-01Originating Department: Department of Permitting ServicesEffective Date: Feb. 12, 2002

Montgomery County Regulation on:

ADOPTION OF BUILDING CONSTRUCTION STANDARDS DEPARTMENT OF PERMITTING SERVICES

Issued by: The County Executive Regulation No. <u>36-01</u>

Authority: Code Section 8-13 and 8-14 Supersedes: Regulation No. 4-97

Council Review: Method 2 under Code Section 2A-15

Register Vol. 18 , Issue 11
Comment Deadline: November 30, 2001
Effective Date: February 12, 2002.

Sunset Date: None

SUMMARY: This regulation adopts the 2000 edition of the International Residential Code (IRC), with

amendments. It governs all detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of

egress and their accessory structures, within Montgomery County.

ADDRESS: Department of Permitting Services

255 Rockville Pike, Second Floor Rockville, Maryland 20850-4166

BACKGROUND INFORMATION:

Inasmuch as the International Code Council (ICC) publishes the international series (I-

series) of construction standards every three years, and the State of Maryland adopts these standards and obligates its political subdivisions to adopt the standards within a specific time period, Montgomery County must adopt these standards within the prescribed period.

Sec. 1.

This regulation is adopted pursuant to Sections 8-13 and 8-14 of the Montgomery County Code (MCC), 1994, as amended, and applies to the construction, alteration, addition, repair, removal, demolition, use, location, occupancy, and/or maintenance of all detached one- and two-family dwellings and multiple single family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures, within Montgomery County. It supersedes Executive Regulation 4-97, dated July 1, 1997, and all previous regulations adopting the CABO One and Two Family Dwelling Code. Its purpose is to adopt the 2000 edition of the IRC with amendments necessary to achieve uniformity and consistency with Maryland and Montgomery County laws and ordinances, as well as department/division policies and procedures.



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Where this regulation differs from the Montgomery County Fire Safety Code (fire code), it does not preempt or negate any more restrictive provisions of that code.

AMENDMENTS TO THE 2000 INTERNATIONAL RESIDENTIAL CODE (IRC)

- Sec. 2. Section R101.2. Add the following: Exception: A townhouse may include a *loft*. (See the definition *townhouse loft* in Sec. 7 of this regulation).
- Sec. 3. Section R105.2, Items 1 & 2. Delete. Item 3. Change 4 to 4 ½ and 1219 to 1372. Sections R105.3.1.1, R105.3.2, and R105.5. Delete.
- Sec. 4. Section R108.1. Replace the second sentence with the following: Required fees shall be paid for each separate permit application. Sections 108.2 through 108.5. Delete.
- Sec. 5. Sections R109.1 through R109.1.6. Delete all <u>except</u> R109.1.2, R109.1.5, and R109.1.5.1 and replace with the following: R109.1 Types of inspections. The following inspections must be conducted for all buildings and structures:
 - 1. Footings: Conducted <u>prior</u> to concrete placement and after excavations for all footings and thickened slabs are completed; after form work, reinforcing steel, concrete-encased electrode (for new dwellings), and grade stakes are in place; and after sediment control measures are installed according to the approved sediment control plan.
 - 2. Foundation/parging or back-fill: Conducted after the exterior walls have been waterproofed and the exterior drain tiles have been installed, or weep holes at least 2 inches (51 mm) in diameter, spaced at a maximum of 6 feet (1828 mm) on center, are in place for interior drain tiles to be installed at a later date. Weep hole inlets must have a minimum of 6 inches (153 mm) of gravel for the full perimeter of the foundation, extending at least 12 inches (306 mm) from the inlets and covered by a layer of approved filter membrane material.
 - 3. Concrete slab-on-ground floor: Conducted after the installation of the gravel base, vapor barrier, slab edge insulation, and required radon-control features prescribed in Appendix F. When a sump crock is used for radon venting, it must be in place at the time of this inspection.
 - 4. Wall check (house location survey): The owner must have a house location survey prepared and certified by a Maryland Registered Land Surveyor and must submit a copy to the building official for approval <u>prior</u> to erecting the framing. A wall check not identified by a premise address and permit number will <u>not</u> be accepted. A framing inspection will not be conducted without an approved wall check.
 - 5. Masonry fireplace/flue: Conducted after the fireplace and first flue liner section are completed.
 - 6. Factory-built fireplace/flue: Conducted at the framing inspection after installation of the unit.



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- 7. Framing ("close-in"): Conducted after completion of all framing, rough electrical/mechanical construction, and rough plumbing, just prior to concealment with insulation or interior finishing materials. The plumbing inspection approval must have been granted by the Washington Suburban Sanitary Commission (WSSC). The rough wiring and mechanical inspections must be requested at the same time. When the floor framing is less than 36 inches (914 mm) above the surface below, a framing inspection must be requested prior to installation of any floor deck.
- 8. Final: Conducted after the building is completed and ready for occupancy, but prior to settlement on the house, unless the contract owner waives the requirement for final inspection and provides the building official with a written copy of the waiver. For new construction, final mechanical and electrical inspections must be requested with the final building inspection, and the address numbers must be displayed in accordance with the requirements of the fire code. If an owner refuses access within a reasonable time after a house is completed, the building official may close the permit file, but this action will not relieve the owner from any obligation to comply with applicable codes. The final inspection must be requested and approved before a building (or portion thereof) is used or occupied.
- 9. Reinspection: Any of the above inspections disapproved twice for the same violation will be subject to a reinspection fee, as established in the Schedule of Permit and License Fees, which must be paid before any further inspections will be performed at the building site.
- Sec. 6. Sections R110 and R112. Delete.
- Sec. 7. Section R202. To the definition *dwelling unit* add: A dwelling unit may contain a *family day care home* or a *group day care home* as defined in Chapter 59, Montgomery County Code. Add the definition *townhouse loft*. A habitable area between the roof eaves and ridge of a townhouse, not exceeding 60% of the floor area immediately below and not constituting a story of height.
- Sec. 8. Table R301.2(1). Under the headings indicated insert the appropriate criteria, as follows: GROUND SNOW LOAD--30 pounds per square foot (psf); WIND-Speed--90 miles per hour (mph); SEISMIC DESIGN CATEGORY--B; SUBJECT TO DAMAGE FROM-Weathering—severe, Frost line depth—24 inches (612 mm), Termite—moderate to heavy, and Decay—slight to moderate; WINTER DESIGN TEMP—13 degrees Fahrenheit (F); FLOOD HAZARDS—yes; footnote h: (a), (b) July 2, 1979.
- Sec. 9. Section R305.1, Exception 2. Delete. Exception 3. Delete the <u>first</u> occurrence of the word "required." Delete the phrase "with no portion of the required floor area less than 5 feet" and replace it with the phrase "Any floor area having less than 5 feet of ceiling height shall not be considered part of the room area and shall not be allowed to have any permanent fixtures or furnishings such as, but not limited to, bathtubs, showers, water closets, sinks, cabinets, counters, and shelves."
- Sec. 10. Section R309.2. After the first sentence add: A garage in a townhouse with a *loft*, totaling four



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floors, must be separated from the balance of the townhouse by at least one-hour fire resistance rated assemblies supported by at least one-hour fire protected construction.

- Sec. 11. Section R310.1. In the first sentence delete the phrase "Basements with habitable space and" and after the word "room," insert the phrase "and every habitable room in a *townhouse loft*."
- Sec. 12. Section R311.1. Add the following: Exit access from a *townhouse loft* to the exit door must not require vertical travel of more than two stories.
- Sec. 13. Section R314.2. Change 7¾ to 8¼, 197 to 210, 10 to 9, and 254 to 229.
- Sec. 14. Section R314.4. Change 10 to 9 and 254 to 229.
- Sec. 15. Section R314.6. Change 11 to 9 and 279 to 229.
- Sec. 16. Section R316.1. After the <u>first</u> occurrence of the phrase "floor or grade below" insert the phrase "and retaining walls with a difference in grade level on either side of the wall exceeding 4 feet (1219 mm) and within 2 feet (610 mm) of a walk, path, parking, lot, or driveway on the high side."
- Sec. 17. Section R317. To the title add: AND AUTOMATIC SPRINKLER SYSTEMS. Add a new section as follows: R317.3 Automatic sprinkler system required. In each development of more than four detached one- or two-family dwellings an approved automatic sprinkler system must be installed in the primary sales model, including any sales office areas. An approved automatic sprinkler system must be installed in every townhouse. The sprinkler system design, installation, inspection, and testing must be in accordance with the requirements of the fire code.
- Sec. 18. Section R327.1. To the first paragraph add the phrase "and the Floodplain District Requirements, Article III, Chapter 19, of the Montgomery County Code, and Executive Regulation 108-92 AM."
- Sec. 19. Add a new section as follows: Section R401.6 Special conditions. Design and construction of all buildings and structures within 1000 feet of a known municipal solid waste (MSW) landfill site that does not currently have an operational land fill gas (LFG) monitoring and removal system, shall require special engineering of foundation systems, including walls and floor slabs, to provide for the safety of occupants against hazards from LFG concentration. Special subsurface investigations shall be conducted, at the owner's expense, by an approved and qualified engineer or geologist to determine the extent of the potential hazard. The study must identify the potential hazards, and mitigation plans for the site must be incorporated into the construction documents and approved prior to issuance of a building permit. All buildings and structures within 1000 feet of the boundary of a MSW landfill shall be equipped with a methane gas detector with an alarm activation level of 20% of the lower explosive limit (LEL--1% by volume).
- Sec. 20. Section R403.1.4. Add second exception: One-story detached accessory structures, excluding garages and carports, used as tool and storage sheds, playhouses and similar uses and not exceeding 200 square feet in floor area.



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- Sec. 21. Section R405.1. Delete the exception.
- Sec. 22. Section R406.1. Delete.
- Sec. 23. Section R406.2. Delete the first sentence and replace with the following: Exterior foundation walls retaining earth and enclosing usable spaces below grade must be waterproofed with an approved waterproofing system or a membrane extending from the tops of the footings to finished grades.
- Sec. 24. Section R408.2. Delete Exception 1. Delete the second sentence of Exception 2.
- Sec. 25. Section R506.2.3. Delete Exception 3.
- Sec. 26. Section N1101.1. Add the following exception: One-story additions of 200 square feet, or less.
- Sec. 27. Sections G2411 through G2423. Delete.
- Sec. 28. Chapters 25 through 42. Delete.
- Sec. 29. Appendix F. Appendix F is hereby adopted in its entirety.
- Sec. 30. Appendix G. Appendix G is hereby adopted in its entirety, with the following modifications to Section AG105.2: Item 1. Change 48 to 60 and 1219 to 1524; Item 9.2. Delete and substitute the following: 9.2. All doors with direct access to the pool through that wall must be equipped with an alarm that produces an audible warning when the door and its screen, if present, are opened. The alarm must be audible throughout the house during normal household activities. The alarm system may be equipped with a manual means to temporarily deactivate the system for a single opening. The deactivation switch(es) must be located at least 54 inches (1372 mm) above the threshold of the door; Item 9.3. Delete.
- Sec. 31. Appendix K. Appendix K is hereby adopted in its entirety.

EFFECTIVE DATE

Sec. 32. This regulation is effective on February 12, 2002 .

IRC ERRATA: Table R301.2(1): First column, Revise header as follows: "Ground Snow Load"